

Annual Examination-2019

Computer Applications

Std :8

Marks : 80

Time :2hrs

Section A

- 1) What is Operating System ? [1]
- 2) Write any two disadvantages of batch processing ? [2]
- 3) Write the differences between multiprogramming and multiprocessing ? [2]
- 4) What is the most popular single user operating system ? [1]
- 5) Differentiate between cold booting and warm booting ? [2]
- 6) Name two software used for free app development ? [1]
- 7) Name two social networking apps that are used to write short messages. [1]
- 8) What is meant by Android mobile ? [2]
- 9) What is meant by a mobile app? [1]
- 10) Differentiate between Facebook and WhatsApp ? [2]
- 11) Name the social network in china? [1]
- 12) What is Network Topology ? [1]
- 13) Name the different types of network ? [1]
- 14) Write any 2 advantages of computer network ? [2]
- 15) Write the advantages of star topology ? [1]
- 16) Write the disadvantages of Ring topology ? [1]
- 17) What is Bus topology ? [1]
- 18) Distinguish between LAN and WAN ? [2]
- 19) What is cloud computing ? [1]
- 20) Distinguish between = and == [1]
- 21) What are the primitive data types ? [1]
- 22) Distinguish between implicit and explicit type conversion ? [2]
- 23) Define Byte code ? [2]
- 24) Define the term Keyword in java ? [1]

25) Write java expression for the following :-

i) $x = \frac{\sqrt{(a+b)^n}}{a+b}$ ii) $2\pi r$

26) Evaluate the following :-

i) $y -= ++y + y-- + --y$; when `int y=4`

ii) $x += x++ - y-- + y*(++x)$; when `x=5, y=9`

27) Write the output :-

```
double x=Math.floor(16.3);
```

```
double y=Math.ceil(-2.8);
```

```
System.out.println(x);
```

```
System.out.println(y);
```

28) Rewrite the following program segment with out using logical operator .

```
if(std>=8 &&std <=10)
```

```
System.out.println("High School");
```

Section B (8x5=40)

Question 1

Write a program to accept the year of release of a movie , title of the movie and popularity rating of the movie . Display the title of the movie and a message based on the rating as per the table given below.

Rating	Message to be displayed
0.0 to 2.0	Flop
2.1 to 3.4	Semi hit
3.5 to 4.5	Hit
4.6 to 5.0	Super hit

Question 2

Write a program to input name , age and monthly income of a person . Calculate the income tax as per the table given below .

Annual Income(ai)	Income Tax
Does not exceed Rs 1,60,000	0
Above 1,60,000 but below or equal to Rs 5,00,000	5% of annual income
Above 5,00,000 but below or equal to Rs 8,00,000	Rs 30,000+ 6% of annual income
Above 8,00,000	Rs 50,000+ 7% of annual income

Question 3

On the basis of sales, a pharmaceutical company announces the following commission for their Medical Representatives and Distributors.

Sale	Commission of Representative	Commission of Distributor
Up to Rs 10,000	5%	
Rs 10,001 to Rs 20,000	8%	2%
Rs 20,001 to Rs 30,000	10%	3%
More than Rs 30,000	12%	4%
		5%

Write a program to accept monthly sale and type (R for Medical Representative, D for Distributor) and calculate the commission.

Question 4

An electricity board charges the following rate to customers:

<u>Number of units</u>	<u>Rate per unit</u>
First 100 units	Rs 2.50
Next 100 units	Rs 3.50
Next 200 units	Rs 5.00
Remaining units	Rs 7.00

Write a program to input name of the customer and units consumed. Calculate the bill as per the tariff and Print the information in the following format.

Name of the customer :

Units consumed :

Bill Amount :

Question 5

Write a program to accept the following information:-

Vehicle number(integer type)

Number of hours the vehicle is parked in the parking lot (integer type)

Compute the parking charge at the rate of Rs 5/- for the first hour and Rs 2.50 for each additional hour.

A surcharge(additional charge) of 3.5% charged if the number of hours the vehicle is parked above 5 hours.

Print the following information

Vehicle number :

Number of hours:

Parking charge :